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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/075,618	02/15/2002	Toru Shiozaki	2002_0249	2831

513 7590 06/11/2002

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EXAMINER

SOMMER, ANDREW R

ART UNIT	PAPER NUMBER
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3663

DATE MAILED: 06/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/075,618

Applicant(s)

SHIOZAKI ET AL.

Examiner

Andrew R Sommer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1. 6) ☐ Other:

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner points specifically to the “*separating means for separating at least said input optical signal from an optical signal after amplification by said amplifying means.*” It cannot be determined what this additional (in addition to the input optical signal) optical signal is. It seems as though “an optical signal” should be at least inclusive of the dummy optical signal, as per the specification. The Examiner suggests possibly rephrasing this limitation to read: “*separating means for separating at least said input signal from the dummy optical signal after optical amplification.*”

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 11 is rejected under 35 U.S.C. 102(b) as being anticipated by Kitamura et al. (JP 11-135862) (hereafter “Kitamura”).

Regarding claim 11, Kitamura teaches an optical amplifying method for amplifying an input optical signal, said method comprising: (1) transmitting said input optical signal (the input signal is transmitted through splitter, 211), and emitting (from

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source, 208), based on said transmitted optical signal, a dummy optical signal having a waveform obtained by inverting a waveform of said input optical signal (the input signal has its logic inverted, thus obtaining an inverted waveform of the input optical signal; Fig. 2), the dummy optical signal, having a different wavelength than the input optical signal ( $\lambda_2$  – the wavelength of the dummy optical signal); (2) collectively amplifying said transmitted input optical signal and the dummy optical signal (using amplifier 202); and (3) separating said input optical signal from an optical signal after amplification, (using filter 209).

### ***Allowable Subject Matter***

Claims 1-10 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

The following is an examiner's statement of reasons for allowance: The prior art of Kitamura (JP 11-135862) teaches all of the claimed limitations except for the light emitting means that transmits the input optical signal and emits a dummy optical signal. A light emitting means that transmits the input signal and emits a dummy optical signal as claimed (having an inverted waveform) is not taught, nor suggested by the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following references disclose the state of the art in optical amplifiers with surge protection: Takehana et al. ('610); Takahashi ('616); Taneda et al. ('385) using a parametric oscillator to perform surge protection); Miyazaki et al ('422) Majima ('360); Chikama ('195); Nakamura ('643); Asahi ('731); Kosaka et al. ('422); Taneda et al. ('385); Nabeyama et al. ('227); Shibuya ('749); Aoki et al. ('514); Karasek et al. (IEE Proc. Optoelectronics); and Nakamura et al. (JP 10-51395).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew R Sommer whose telephone number is (703) 605-4274. The examiner can normally be reached on M - F 7:00 - 3:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas H. Tarcza can be reached on (703) 306-4171. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9326 for regular communications and (703) 872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

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ars  
June 4, 2002

  
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SUPERVISORY PATENT EXAMINER  
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